

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for controlling printing of a document~~electronically monitoring the contents of a print job generated from print data~~, comprising:
processing the document to form a print job including print data, the print data including drawing commands;
analyzing the ~~print data~~ drawing commands to build statistical information about content within the print data; and
categorizing the print job using the statistical information according to pre-specified categorization criteria.
2. (Currently amended) The method of claim 1, wherein the analyzing ~~the print data~~ to build statistical information is incorporated in a printer driver.
3. (Original) The method of claim 2, wherein at least a portion of the printer driver is a software printer driver.
4. (Original) The method of claim 2, wherein at least a portion of the printer driver is a firmware printer driver.
5. (Currently amended) The method of claim 1, further comprising storing the ~~classification~~ categorization in a log file.

6. (Original) The method of claim 5, further comprising using the categorization information from the log file for examination, building, enhancing and verifying future categorization matches.

7. (Original) The method of claim 1, further comprising gathering input criteria from a user before a print job is initiated and categorizing the print job based on the statistical analysis and the input criteria.

8. (Original) The method of claim 1, further comprising:
classifying the print job as an unknown job type if the categorizing is unsuccessful.

9-11. (Canceled)

12. (Original) The method of claim 5, further including:
processing the log file so as to determine effectiveness of the categorizing; and
updating the pre-specified categorization criteria so as to improve the effectiveness of the categorizing.

13. (Original) The method of claim 12, further including:
developing at least one new categorization category.

14. (Original) The method of claim 5, further including:
processing the log file so as to characterize printing usage.

15. (Canceled)

16. (Original) The method of claim 1, wherein analyzing and categorizing are performed before the print job is printed.

17. (Currently amended) A system for managing printing operations on a computer, comprising:

an application program that generates drawing commands for printing a document;

a statistical module that collects the drawing commands and collapses the collected drawing commands into pre-determined classifications; and

a filtering module coupled to the statistical module that filters the pre-determined classifications using pre specified category criteria and categorizes the print job into at least one predefined print job category.

18. (Original) The system for managing printing operations of claim 17, further comprising a secondary filter module that uses the pre-determined classifications and input criteria predefined by a user and relating to the printing operation for categorizing the print job.

19. (Original) The system for managing printing operations of claim 17, wherein the drawings commands include at least one of vector graphics, raster graphics or textual fonts and are predefined by an administrator.

20. (Original) The system for managing printing operations of claim 17, wherein the statistical module is incorporated in a software printer driver.

21. (Original) The system for managing printing operations of claim 17, further comprising a client monitoring program that determines whether a new classification category needs to be developed.

22. (Original) The system for managing printing operations of claim 21, wherein the client monitoring program is preprogrammed to send an error message to a user attempting to initiate the print job blocking all print jobs that are classified with unknown designations.

23. (Currently amended) In a system for electronically monitoring the contents of a print job generated from a document~~print data~~, a computer-readable medium having computer-executable instructions for performing a process on a computer, the process comprising:

processing the document to form the print job including print data, the print data including drawing commands;

statistically analyzing the print data to form object type percentages using the drawing commands~~information~~;

classifying the print job using the statistical analysis and according to pre-specified categorization criteria; and

storing the classification in a log file and using the classification from the log file for examination and for building, enhancing and verifying future classification matches.

24. (Currently amended) The computer-readable medium having computer-executable instructions for performing the process of claim 23, further comprising gathering input criteria from a user before ~~a~~the print job is initiated and classifying the print job based on the statistical analysis and the input criteria.

25. (Original) The computer-readable medium having computer-executable instructions for performing the process of claim 24, further comprising monitoring all print jobs and providing at least one of an automatic rejection, acceptance or confirmation of the print job as user feedback before the print job is sent to peripheral device.

26. (Original) The computer-readable medium having computer-executable instructions for performing the process of claim 25, further comprising developing new classification categories based on the monitoring of the print jobs.

27. (Original) A system for managing print jobs of documents containing at least one page, comprising:

means for collecting drawing commands for a given page;

means for collapsing the collected drawing commands into pre-determined categories;

and

means for classifying the print job using the pre-determined classifications.

28. (Currently amended) A printing system working in a computer environment, comprising:

an application program that generates print data for a print job, the print data including drawing commands;

a printer that receives the print data for printing the print jobs;

a software printer driver coupled to the printer and application program for analyzing the ~~print data~~ drawing commands to build statistical information about content within the print data; and

a filter module coupled to the software printer driver for categorizing the print job using the statistical information according to pre-specified categorization criteria.

29. (Original) The printing system of claim 28, further comprising a log file that stores the categorization of the print job.

30. (Original) The printing system of claim 28, wherein the categorization information from the log file is used for examination, building, enhancing and verifying future categorization matches.

31. (Currently amended) The printing system of claim 28, wherein the application program gathers input criteria from a user before a print job is initiated and wherein the filter module categorizes the print job based on the statistical analysis and the input criteria.

32. (Currently amended) The printing system of claim 28, further comprising a client monitoring program that approves the print job and allows the print job to be printed without user confirmation.

33. (Original) A method for managing print jobs of documents containing at least one page, comprising:

- collecting drawing commands for a given page;
- collapsing the collected drawing commands into pre-determined categories; and
- classifying the print job using the pre-determined classifications.

34. (Original) The method of claim 33, wherein the collecting includes counting arc, rectangle, brush pattern and text out commands.

35. (Original) The method of claim 34, wherein the pre-determined classifications include text, at least one of solid or unfilled circle line/graphics, clip art style images, and photographic images.

36. (New) The system of claim 17, wherein the statistical module sorts the drawing commands by command type, and groups the sorted drawing commands into predetermined

object types so as to identify a percentage of the drawing commands that is associated with each of the predetermined object types.

37. (New) The system of claim 36, wherein the filtering module compares the percentage of the drawing commands associated with each of the predetermined object types against predefined percentages associated with the pre specified category criteria so as to identify the at least one predefined print job category.

38. (New) The method of claim 1, wherein the categorizing denotes a print job category for the print job, the method further comprising inhibiting printing of the print job if the print job category matches a predefined category.

39. (New) The method of claim 1, wherein the categorizing denotes a print job category for the print job, the method further comprising informing an administrator if the print job category matches a predefined category.

40. (New) The method of claim 1, wherein the categorizing denotes a print job category for the print job, the method further comprising providing an incentive to a user if the print job category matches a predefined category.

41. (New) The method of claim 1, wherein the categorizing denotes a print job category for the print job, the method further comprising billing a user according to a price associated with the print job category.

42. (New) The method of claim 41, wherein different print job categories have different prices.

43. (New) The method of claim 1, wherein the analyzing includes sorting the drawing commands on each page of the print job by command type, and grouping the sorted drawing commands into predetermined object types so as to identify a percentage of the drawing commands in the print job that is associated with each of the predetermined object types.

44. (New) The method of claim 43, wherein the categorizing includes comparing the percentage of the drawing commands associated with each of the predetermined object types against predefined percentages associated with the pre-specified categorization criteria so as to identify a category for the print job.